Wroble, Julie

From: Wroble, Julie

Sent: Monday, February 29, 2016 2:55 PM

To: McClintock, Katie

Cc: armitage.sarah@deq.state.or.us; Narvaez, Madonna

Subject: RE: Action Levels (3)

Sarah:

I'm not sure I follow the basis for the action levels you provided. Is there an additional write up somewhere?

I would say that if the metals are carcinogens, you could potentially go as high as 100 times the value for initial screening as that would be equivalent to a 1E-04 cancer risk for chronic exposures. However, many of the metals also have noncancer values and you wouldn't want to exceed an HQ of 1 as that would increase the chance for adverse health effects. Once we get into more careful consideration of the data, we may want to consider the type and severity of adverse health effects.

Cr – 8 (1E-04 cancer risk)

Co - 6.3 (HQ = 1)

Cd - 10 (HQ = 1)

Mn - 52 (HQ = 1)

Ni - 15 (HQ = 1)

PB - ok at 150

This does get pretty tricky pretty quickly.

OAQPS may have a different read. I'm speaking for Region 10 at this point.

Julie

From: McClintock, Katie

Sent: Monday, February 29, 2016 1:00 PM **To:** Wroble, Julie < Wroble.Julie@epa.gov>

Subject: FW: Action Levels (3)

Importance: High

From: ARMITAGE Sarah [mailto:ARMITAGE.Sarah@deg.state.or.us]

Sent: Monday, February 29, 2016 12:45 PM

To: McClintock, Katie < < McClintock. Katie@epa.gov >

Subject: Action Levels (3)

Importance: High

Katie,

Thanks for sharing these with EPA folks for feedback on their level of protectiveness.

Two thoughts I had were comparing to the action levels used in the schools monitoring project (although there may be scientific updates since 2011) and the NATA benchmarks.

Appreciate your ongoing help.

Sarah